Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
DEPARTMENT OF ENERGY RESOURCES

SMALL CLEAN ENERGY INFRASTRUCTURE FACILITY SITING & PERMITTING (225 CMR 29.00)

DRAFT GUIDELINE

Guideline on Uniform Set of Baseline Health, Safety, Environmental and Other Standards

Effective Date: March xx, 2026

Background and Purpose

The purpose of this Guideline on Uniform Set of Baseline Health, Safety, Environmental and Other Standards ("Baseline Standards") is to define the standards applicable to a Consolidated Local Permit pursuant to 225 CMR 29.06, or Constructive Approval pursuant to 225 CMR 29.12. The Applicant is required to consult the Baseline Standards in preparing its Application, based on the type of Small Clean Energy Infrastructure Facilities (SCEIF) Project.

The Baseline Standards apply throughout the design, construction, operation, maintenance, and decommissioning of a SCEIF. This guideline is organized by standards that apply to all SCEIFs and those that apply only to specific types of SCEIFs. The Department emphasizes that the Baseline Standards below do not constitute an exhaustive listing of all relevant health, safety, environmental and other standards that could be applicable to a SCEIF. Rather, the Baseline Standards reflect the key provisions that the Department is highlighting.

In the event of a Constructive Approval, pursuant to 225 CMR 29.12 and 980 CMR 17.00, the Constructive Approval Permit would incorporate by reference the applicable Baseline Standards in effect at the time of the approval, which include the standards that apply to all Clean Energy Infrastructure Facilities (CEIF) (section I, below), and the additional Baseline Standards that apply to the specific type of CEIF proposed (sections II – VII below).

1. Guidance Development

This guidance was developed in consultation with the Energy Facilities Siting Board (EFSB). A draft version of the guidance document was released on XXX for public comment. DOER reviewed all public comments received on the proposal through the end of XXX.

2. Standards that Apply to All Clean Energy Infrastructure Facilities (CEIF):

CEIF -- All Facilities	
Topic	**Proposed Standard**
Aboveground Storage Tanks (More than 10K Gallons)	Pursuant to 502 CMR 5.00, CEIFs shall follow the uniform requirement and procedures for the construction, maintenance and use of aboveground storage tanks with a gross capacity of more than 10,000 gallons used for storage of any fluid other than water.
Aboveground Storage Tanks (Less than 10K Gallons)	Pursuant to 527 CMR 9.00, CEIFs shall follow the uniform design, installation, testing, and maintenance of underground and aboveground storage tanks and containers with a capacity of less than 10,000 gallons used for storage of any fluid other than water.
Air Pollution	Pursuant to 310 CMR 7.00, CEIFs shall prevent the occurrence of conditions of air pollution where such do not exist and facilitate the abatement of conditions of air pollution where and when such occur. CEIFs shall be designed to attain, preserve, and conserve the highest possible quality of the ambient air compatible with needs of society.
Archeological Resources	Pursuant to 950 CMR 70.00, CEIFs shall follow requirements for compliance with the "Antiquities Act," M.G.L. c. 9, §§ 26 through 27C. The purpose is to standardize the procedures for conducting archeological field investigations in Massachusetts in order to ensure the conservation of archeological resources and the highest quality of archeological research.
Areas of Critical Environmental Concern	Pursuant to 301 CMR 12.00, CEIFs shall ensure that projects avoid, minimize and mitigate areas within the Commonwealth that are designated Areas of Critical Environmental Concern (ACEC), in which unique clusters of natural and cultural resources exist and warrant a high level of concern and protection.
Article 97 Land Disposition	Article 97 of the Articles of Amendment to the Constitution of the Commonwealth of Massachusetts, and the Public Lands Preservation Act, codified at M.G.L. c. 3, § 5A, protect state and municipal lands acquired for natural resource, conservation, and recreation purposes and establish provisions that limit changing the use of, or disposition, of Article 97 lands. These provisions include a required two-thirds vote of the Massachusetts General Court and a “no net loss” policy, among others. CEIF projects should avoid, but are not prohibited from, being sited on Article 97 lands. CEIF projects shall follow all requirements and applicable policies pertaining to Article 97 lands.
Asbestos	Pursuant to 454 CMR 28.00, CEIFs shall follow the requirements necessary to protect the health and safety of workers and the general public associated with the repair, removal, enclosure, encapsulation or disturbance of asbestos or asbestos-containing material
Aviation Hazards	CEIF Design shall adhere to Federal Aviation Administration standards of 14 CFR Part 77 and FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting
Benefits	CEIFs shall endeavor to provide and enhance co-benefits of projects such as shared use recreational paths or access to nature that leverage

CEIF -- All Facilities	
Topic	**Proposed Standard**
	investments required to provide the intended primary energy benefits of the project.
Building Code	CEIFs shall be designed and constructed in accordance with the provisions of the Massachusetts State Building Code 780 CMR.
Chapter 91 (Trust Lands)	CEIFs shall comply with 310 CMR 9.00 to preserve and protect the public's interest in tidelands, Great Ponds, and non-tidal rivers and streams in accordance with the public trust doctrine, and M.G.L. c. 91.
Coastal Zone Management (CZM)	Pursuant to 301 CMR 20.00, CEIFs shall follow the requirements of the Coastal Zone Management Program for projects in, or affecting, the coastal zone for which consistency with Coastal Program Policies is authorized, as overseen by the CZM Office.
Cybersecurity	CEIFs shall reflect compliance with applicable cybersecurity standards such as those of the U.S. Department of Commerce's National Institute of Standards and Technology, the North American Electric Reliability Corporation, or the International Organization for Standardization.
Decommissioning/ Abandonment	CEIFs shall prepare a decommissioning plan that includes removal of all structures, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that any agricultural ground upon which the facility and/or system was located is again tillable and suitable for agricultural uses. Disturbed earth shall be graded and re-seeded as necessary to minimize erosion unless the landowner requests in writing that the access roads or other land surface areas not be restored. Hazardous material from the property shall be disposed of in accordance with federal, state, and local law. Applicants shall provide a form of surety to the Local Government that shall compensate the Local Government in the event that the Local Government must install and remediate the site's landscape. The Applicant shall determine the cost of decommissioning a system as the total amount of equipment and labor rates outlined by the Massachusetts Department of Labor Standard's Prevailing Wage Program and shall account for increased costs due to inflation at a rate of 2.5% per year. The Local Government shall reserve the right to have the decommissioning plan reviewed by a third-party engineer at the cost to the Applicant. A CEIF shall be considered abandoned when it ceases to operate or undergo active repair or replacement, for more than eighteen (18) months, without written consent of the Local Government.
Electrical Code	CEIF electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of 527 CMR 12.00: Massachusetts Electrical Code.

CEIF -- All Facilities	
Topic	**Proposed Standard**
Excavation and Trench Safety	Pursuant to 520 CMR 14.00, CEIFs shall follow the standards to protect the safety of residents of the Commonwealth from the hazards inherent in trenches.
Forest Cutting Practices	Any CEIF that involves cutting on lands devoted to forest growth, as defined by 302 CMR 16.00, owned or administered by private person, corporations or organizations or by and federal, state, county, municipal or other public agency is required to ensure that the following values are not jeopardized: (1) continuation and increase of the supply of forest products; (2) conservation of water; (3) maintenance of air and water quality; (4) prevention of floods; (5) prevention of soil erosion; (6) improvement of condition for wildlife; and (7) improvement of conditions for outdoor recreation.
Emergency Response	The Applicant shall create an emergency response plan ("ERP") that shall: (1) be developed in consultation with local public safety officials; and (2) require close coordination between the developer and first responders to ensure that first responders are fully informed about emergency events and understand how to address such events without assuming unnecessary personal risk. The ERP shall include: (1) equipment types and layouts without compromising Critical Energy/Electric Infrastructure Information; (2) safety data sheets for materials used or stored onsite; (3) a firefighting plan with suggested response procedures for various emergency conditions; and (4) the emergency response tasks that will be undertaken and completed by the operator of the facility/facilities. The ERP shall be developed in consultation with and approved by the appropriate Local Government board or department.
Fire Code	CEIFs shall be designed and constructed in accordance with the provisions of the Massachusetts Comprehensive Fire Safety Code 527 CMR 1.00. Battery Energy Storage Systems must also meet fire standards listed below.
Hazardous Waste	Pursuant to 310 CMR 30.000, Facilities shall protect public health, safety, and welfare, and the environment, by comprehensively managing the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste in Massachusetts.
Herbicides Use in Rights-of-Way	The purpose of 333 CMR 11.00 is to establish a statewide and uniform regulatory process which will minimize the uses of, and potential

CEIF -- All Facilities	
Topic	**Proposed Standard**
	impacts from herbicides in rights-of-way on human health and the environment while allowing for the benefits to public safety provided by the selective use of herbicides. CEIFs shall follow these requirements.
Herbicide/Pesticide Application	Clearing of natural vegetation shall be limited to what is necessary for the construction, operation, and maintenance of the facility. If applicable, the Applicant shall ensure that any herbicide or pesticide application is approved by Massachusetts Department of Agricultural Resources and consistent with local regulations.
Historic Places	950 CMR 71.00 establishes a standardized procedure to protect the public's interest in preserving historic and archaeological properties. The project proponent must adopt all prudent and feasible means to eliminate, minimize, or mitigate adverse effects.
Lighting	Exterior lighting design shall be limited to lighting required for health, safety, security, emergencies, and operational purposes, and shall be specified to avoid off-site lighting effects. Project shall implement dark-sky friendly lighting solutions that are designed to minimize the amount of light that escapes upward into the sky and shall be International Dark Sky Association compliant (See http://www.darksky.org/fsa/).
Massachusetts Endangered Species Act	Pursuant to 321 CMR 10.00, CEIFs shall protect the Commonwealth's Endangered, Threatened, and Special Concern species and their habitats.
Massachusetts Water Resources Authority 8(M) Permit	Pursuant to St. 1984, c. 372, 8(m), CEIFs that need to build, construct, excavate or cross within or near an MWRA easement or property are required to seek an 8(m) permit to protect MWRA infrastructure and avoid accidents.
Noise	Facilities must comply with any local noise bylaws, regulations or ordinances as well as the requirements of MassDEP's noise regulations at 310 CMR 7.10. MassDEP's Noise Policy states that a source of sound is considered to be violating 310 CMR 7.10 if the source either increases the broadband sound level by more than 10 decibels above ambient or produces a "pure tone" condition – when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more. These criteria are measured both at the property line and at the nearest inhabited residences or other sensitive receptors. Sound suppression or mitigation measures may be implemented to achieve desired sound levels.
Paving Restoration	Pursuant to D.T.E. 98-22, public utility companies shall comply with requirements for restoring municipal street surfaces after performing excavations.
Pollinator Friendly Practices	Facilities shall limit clearing of natural vegetation, including mowing, to what is necessary for the construction, operation, and maintenance of the SCEIF. Any vegetative cover on the SCEIF's site shall be

CEIF -- All Facilities	
Topic	**Proposed Standard**
	maintained to prevent soil erosion and plantings shall be native species appropriate to the geographical area, consistent with *The Vascular Plants of Massachusetts: A County Checklist provided by the Massachusetts Natural Heritage and Endangered Species Program* and may be located within the setback area. Installation of ground-mounted solar facilities must at a minimum meet the criteria for a silver pollinator certificate, as described by the UMass Clean Energy Extension Pollinator Friendly Solar PV Certification Program.
"Right to Know" (Hazardous Substances)	Pursuant to 454 CMR 21.00, CEIFS shall follow standards and requirements to protect the health and safety of employees through communication of information regarding use of toxic or hazardous substances.
Site Suitability Guidance	Facilities subject to Site Suitability Guidance, as established by the Executive Office of Energy and Environmental Affairs, pursuant to M.G.L. c. 21A, § 30, shall follow said Guidance.
Stormwater Management	Facilities should be constructed as to minimize runoff from impervious surfaces and shall be managed in accordance with the requirements of relevant sections of the Wetlands Regulations, 310 CMR 10.00, the Water Quality Regulations, 314 CMR 9.00, and the Massachusetts Stormwater Handbook.
Surface Water Quality Standards	Pursuant to 314 CMR 4.00, CEIFs shall follow the requirements to protect public health and enhance the quality and value of the water resources of the Commonwealth, including, where appropriate, the prohibition of discharges.
Transmission Line Installation and Maintenance	Facilities with electric transmission lines over 50 kV alternating current shall comply with the safety provisions for the installation and maintenance of electric transmission lines in 220 CMR 125.00.
Visual Impacts	The Applicant shall design a CEIF to minimize visual impacts, including preserving natural vegetation to the maximum extent possible, blending in equipment with the surroundings, adding vegetative buffers to provide an effective visual barrier from adjacent roads and driveways, and to screen abutting residential dwellings. The Applicant shall develop a landscaping plan for the CEIF's site(s) no later than thirty (3)0 days before construction commencement. At minimum, the plan shall detail existing topography and vegetation, and any proposed: (i) vegetation removal; (ii) hardscape (e.g., walkways) and softscape (e.g., vegetative buffering) measures; (iii) woodland preservation; (iv) structural screening (e.g., fencing, decorative masonry and sound walls); (v) site layout measures (e.g., strategic setbacks, orientation, and grading); (vi) integration of materials and designs into the existing landscape (e.g., use of matching palates); (vii) lighting control (e.g., turning off lights when not in use, motion detectors, dimmers, shielded light fixtures, warm-colored bulbs); (viii) irrigation and drainage; (ix) erosion and sediment control; and (x)

CEIF -- All Facilities	
Topic	**Proposed Standard**
	maintenance protocols. The plan shall include native plantings where practicable.
Waste	The Applicant shall comply with the Waste Site Clean Up procedures of 310 CMR 40.00, and all other applicable regulations.
Wellhead Protection	Pursuant to 310 CMR 22.00, CEIFs are prohibited in Zone I areas, unless permissible under provisions of 310 CMR 22.00. CEIFs in Zone II areas, or Zone A areas, although not prohibited, but must follow requirements in 310 CMR 22.00.
Wetlands Protection	Facilities in jurisdictional wetlands resource areas and corresponding buffer zones must comply with the Wetlands Protection Act (WPA"), M.G.L. c. 131, § 40, and the requirements of the WPA regulations at 310 CMR 10.00. Facilities shall follow Local Government wetlands protection bylaws, unless otherwise directed by the Board.

3. Standards that Apply to All Clean Energy Infrastructure Facilities (CEIF), Except for Clean Transmission and Distribution Infrastructure Facilities (LCTDIF and SCTDIF)

CEIF – Except LCTDIF and SCTDIF	
Topic	**Proposed Standard**
Slope	Buildable areas for CEIF (except CTDIF) may not exceed a slope of 15 degrees.

4. Standards that Apply Only to Clean Energy Storage Facilities

Clean Energy Storage Facilities Only (Large and Small)	
Topic	**Proposed Standard**
Electrical	Facilities shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for Energy Storage Systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable: 1) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications), 2) UL 1642 (Standard for Lithium Batteries), 3) UL 1741 or UL 62109 (Inverters and Power Converters), 4) Certified under the applicable electrical, building, and fire prevention codes as required. 5) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements. As required by the state Electric Code, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
Fire Safety	Facilities shall be designed, constructed, and operated in accordance with National Fire Protection Association (NFPA) 855: Standard for the Installation of Energy Storage Systems, as well as the latest edition of the Massachusetts State Fire Code. This includes emergency operations plan and emergency training for facility staff, smoke detection systems, fire control and suppression system, explosion control and spill response measures. Facilities shall be designed to meet UL 9540A fire testing and thermal runaway propagation risk test methods for cell level, module level, unit level, and installation level. Facilities, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70. Facilities shall follow NFPA 855-recommended use of water as the primary fire suppression agent for lithium-ion battery fires, unless alternative fire protection strategies or agents are proven effective, and approved by the Authority Having Jurisdiction (AHJ). NFPA 855 requires an adequate water supply and firewater containment

Clean Energy Storage Facilities Only (Large and Small)	
Topic	**Proposed Standard**
	strategies for both manual and automatic fire suppression using water as the cooling agent.
Setbacks	Facilities shall, if practicable, be set back from other structures, tree lines, and any other combustible materials, as recommended in NFPA 855.
Signage	Signage for Small Clean Energy Storage Facilities shall be in compliance with ANSI Z535 and shall include the type of technology associated with the battery energy storage systems, any special hazards associated, the type of suppression system installed in the area of battery energy storage systems, and 24-hour emergency contact information, including reach-back phone number.
Wellhead Protection	Municipalities may restrict siting of Small Clean Energy Storage Facilities within Zone II Wellhead Protection Areas.

5. Standards that Apply Only to Ground-Mounted Solar Facilities

Ground-Mounted Solar Facilities Only (Large and Small)	
Topic	**Proposed Standard**
Glare	Projects shall be located so as to minimize glare onto any abutting or nearby properties. Designs may include, but not be limited to, deliberate placement and arrangement on the site, anti-reflective materials, solar glare modeling, and screening.
Setbacks	Minimum setbacks shall be no more than 25 feet off any rear or side lot lines, unless the Local Government can demonstrate a larger setback is required to protect the public health, safety, or environment. Local governments that adopt DOER's model bylaw may establish different setbacks in accordance with the provisions of the model bylaw.

6. Standards that Apply Only to Wind Generation Facilities

Wind Generation Facilities Only	
Topic	**Proposed Standard**
SF6 Alternatives	The Applicant shall investigate alternatives to using SF6 at the facility, and, whenever possible and cost-justified, employ such alternatives. Further, the Applicant shall inform the Local Government when viable alternatives are identified.
Changes in SF6 in Project Equipment	The Applicant shall promptly inform the Local Government if it adds SF6 to any equipment or replaces any equipment due to SF6 loss for the lifetime of the Project.

SF6 Compliance Filing	The Applicant shall provide an annual compliance filing to the Local Government confirming that the Project's SF6 leakage rate has met and continues to meet the leakage rate anticipated in the Decision.

7. Standards that Apply Only to Land-Based Wind Generation Facilities

Land-Based Wind Only	
Topic	**Proposed Standard**
Flicker	Projects shall be sited in a manner that minimizes shadowing or flicker impacts. The applicant has the burden of proving that this effect does not have significant adverse impact on neighboring or adjacent uses.
Siting	May not be sited within: ○ a distance equal to one and one-half (1.5) times the maximum tip height (MTH) of the wind turbine from buildings, critical infrastructure — including Critical Electric Infrastructure and above-ground natural gas distribution infrastructure—or private or public ways that are not part of the wind energy facility; ○ a distance equal to three (3.0) times the maximum tip height (MTH) of the turbine from the nearest existing residential or commercial structure; or ○ (c) a distance equal to one and one-half (1.5) times the maximum tip height (MTH) of the turbine from the nearest property line, and private or public way

8. Standards that Apply to Offshore Wind Facilities or Other Offshore CEIFs

SCEIF – Offshore Wind Transmission	
Topic	**Proposed Standard**
Ocean Management Plan	Under 301 CMR 28.00, pursuant to M.G.L. c. 21A §4C and M.G.L. c. 132A, §§ 12A through 16F (Massachusetts Oceans Sanctuary Act), CEIFs in the Ocean Management Planning Area are subject to siting and performance standards, associated with mapped resources and uses that direct development away from areas with important and high value resources and water-dependent uses.
Ocean Sanctuaries Act	301 CMR 27.00, pursuant to M.G.L. c. 132A, §§ 12A through 16K and § 18 (the Massachusetts Ocean Sanctuaries Act), establishes Ocean Sanctuaries, defines prohibited and allowed Activities in Ocean Sanctuaries, and requires Agencies to protect these Ocean Sanctuaries from exploitation, development, or Activity that would significantly alter or otherwise endanger their ecology or appearance in the issuance of Authorizations for Activities subject to jurisdiction.
Protected Species (Marine)	Pursuant to 322 CMR 12.00, CEIFs must minimize the risk of interaction between vessel activity, fisheries, and North Atlantic right whales.

SCEIF – Offshore Wind Transmission	
Topic	**Proposed Standard**
Underwater Archaeological Resources	Any person who has located a shipwreck or other underwater archaeological resource within inland or coastal waters of the Commonwealth or the lands beneath such waters shall secure a permit from the Board of Underwater Archaeological Resources prior to conducting any activities that may disturb the site or resource. Compliance with the laws and regulations of the Board does not relieve any permit holder of the obligations imposed by other local, state and federal agencies.